

This listing of claims will replace all prior versions of claims in the application.

**Listing of Claims:** Please amend the claims as follows:

**We claim:**

**Claim 1. (Cancelled)**

**Claim 2. (Cancelled)**

**Claim 3. (Cancelled)**

**Claim 4. (Cancelled)**

**Claim 5. (Cancelled)**

**Claim 6. (Currently Amended)** A polypeptide variant of major allergen Phl p 1 from timothy grass which comprises ~~an additional Cys residue compared to the wild-type Phl p 1 sequence, said polypeptide variant comprising a~~ the polypeptide sequence set forth in SEQ ID NO: 2, wherein the variation comprises an additional Cys residue ~~that~~ has been introduced by exchange of Ala 236 in the wild-type Phl p 1 polypeptide sequence.

**Claim 7. (Withdrawn)** DNA molecule which encodes for an allergen variant according to claim 1.

**Claim 8. (Withdrawn)** DNA molecule according to SEQ ID NO 1 which encodes for the allergen variant according to Claim 6.

**Claim 9. (Withdrawn)** A process for the preparation of a polypeptide variant of major allergen Phl p 1 according to claim 6 comprising:

- (a) introducing a base triplet which encodes a Cys residue into a polynucleotide encoding said wild-type Phl p 1 by exchange of Ala 236;
- (b) introducing said polynucleotide of (a) into a host organism and culturing said host organism under sufficient conditions to allow expression of said polypeptide variant; and
- (c) purifying the polypeptide variant.

**Claim 10. (Withdrawn)** A process for the preparation and purification of a polypeptide variant of the major allergen Phl p 1 in soluble form, comprising  
obtaining an insoluble crude protein according to claim 9,

denaturing said insoluble crude protein  
and  
further renaturing said denatured crude protein.

**Claim 11. (Withdrawn)** A process for the purification of a polypeptide variant of the major allergen Phl p 1 according to Claim 9 in soluble form, comprising  
employing a polynucleotide which encodes a fusion protein comprising a His-tag and said polypeptide variant of major allergen Phl p 1,  
expressing said His-tagged polypeptide in said host organism,  
purifying said His-tagged polypeptide using two-stage metal ion chelate affinity chromatography and  
removing said His tag to obtain said polypeptide variant of major allergen Phl p 1 in soluble form.

**Claim 12. (Currently Amended)** The polypeptide variant of claim 6 which is an LM or HM fold variant of said polypeptide of SEQ ID NO: 2 exists in various fold forms.

**Claim 13. (Previously Presented)** A fold form rPhl p 1-LM of the polypeptide variant according to claim 6, which is obtainable by:

- (a) overexpressing in a host organism, a fusion protein comprising the rPhl p 1 polypeptide variant and a His tag;
- (b) denaturing inclusion bodies isolated from the host organism using guanidinium chloride;
- (c) renaturing dissolved protein on a chelate affinity chromatography column;
- (d) removing the His tag;
- (e) employing gel filtration;
- (f) further purifying using chelate affinity chromatography;
- (g) isolating the target protein from the flow-through; and
- (h) further employing gel filtration.

**Claim 14. (Previously Presented)** A fold form rPhl p 1-HM of the polypeptide variant according to claim 6, which is obtainable by:

- (a) overexpressing in a host organism, a fusion protein comprising the rPhl p 1 polypeptide variant and a His tag;
- (b) denaturing inclusion bodies isolated from the host organism using guanidinium chloride;

- (c) renaturing dissolved protein on a chelate affinity chromatography column;
- (d) removing the His tag;
- (e) employing gel filtration;
- (f) further purifying using chelate affinity chromatography;
- (g) eluting the target protein with an imidazole gradient; and
- (h) further employing gel filtration.

**Claim 15. (Previously Presented)** A vaccine which comprises the polypeptide variant according to claim 6 and an acceptable carrier.

**Claim 16. (Withdrawn)** A method for specific immunotherapy of an allergy triggered by major allergen Phl p 1 from timothy grass comprising administering to a subject in need thereof a polypeptide variant of claim 6 or a pharmaceutical composition thereof.

**Claim 17. (Previously Presented)** A pharmaceutical composition comprising a polypeptide variant according to claim 6 and a pharmaceutically acceptable carrier.

**Claim 18. (Withdrawn)** A method for the *in vitro* diagnosis of an allergy which is triggered by major allergen Phl p 1 from timothy grass comprising administering to a subject in need thereof a polypeptide variant of claim 6 or a pharmaceutical composition thereof.

**Claim 19. (Withdrawn)** Recombinant DNA expression vector containing a DNA molecule according to Claim 7 for the treatment of allergies in the triggering of which the major allergen Phl p 1 from timothy grass is involved, by immunotherapeutic DNA vaccination.

**Claim 20. (Withdrawn)** A method for the treatment of an allergy triggered by major allergen Phl p 1 from timothy grass comprising administering to a subject in need thereof an immunotherapeutic vaccine of claim 15.

**Claim 21. (Withdrawn)** Pharmaceutical composition comprising an expression vector according to Claim 19 and/or pharmaceutically usable derivatives thereof, including mixtures thereof in all ratios, and, if desired, excipients and/or adjuvants, for the treatment of allergies in the triggering of which the major allergen Phl p 1 from timothy grass is involved, by immunotherapeutic DNA vaccination.

**Claim 22. (Cancelled)**

**Claim 23. (Previously Presented)** The polypeptide variant of major allergen Phl p 1 from timothy grass according to claim 6 which is

- (a) a polypeptide which is encoded by a polynucleotide consisting of the sequence set forth in SEQ ID NO: 1; or
- (b) a polypeptide which consists of the sequence set forth in SEQ ID NO: 2.